

ABSTRACT OF THE DISCLOSURE

An apparatus for adding a first value and a second value each including a plurality of bits includes combiner units, a carry creation unit and summation units. Bits corresponding to
5 bit positions of the first and the second value form respective columns. Each of the combiner units may provide a generate and propagate bit pair in response to receiving respective bits of the first and the second value which correspond to a plurality of the respective columns. The carry creation unit may create an ordered plurality of carry bits each corresponding to one or more of the generate and propagate bit pairs. Each of the
10 summation units may generate a plurality of sum bits in response to receiving the respective bits of the first and the second value which correspond to the plurality of respective columns.

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